Calendar of Events

November 1, WEDNESDAY:
- **Board of Directors’ meeting** at the home of Barbara Ertter, 1859 Catalina Ave., Berkeley. 7:30 p.m. All members welcome.

November 3, 10, 17, and 24, FRIDAYS:
- **Native Here Nursery open**, 9 a.m.-12 noon.

November 4, 11, 18, and 25, SATURDAYS:
- **Native Here Nursery open**, 10 a.m.-1 p.m.

November 5, SUNDAY:
- **Deadline for December Bay Leaf**. Give items to Phoebe Watts or Brett Boltz.

November 7, 14, 21, and 28, TUESDAYS:
- **Propagation for the 2001 sale** of native plants. *Leftover plants for sale*, 9 a.m.-noon (see p. 3).

November 15, WEDNESDAY:
- **Membership’ meeting** (see below).

November 25, SATURDAY:
- **Field trip to Maguire Peak, Sunol Regional Wilderness** (see p. 4).

December 2, SATURDAY:
- **State Board of Directors’ meeting**, 9 a.m-5 p.m. (with lunch break) at the Faculty Club on the UC Berkeley campus. All members are welcome and encouraged to attend (see p. 4).

December 6, WEDNESDAY:
- **Board of Directors’ meeting** at the home of Holly Forbes, 7128 Blake St., El Cerrito. 7:30 p.m. All members welcome.

Membership Meeting Wednesday, November 15  

**The Mount Reba Paleoflora and its Bearing on the Uplift History of the Sierra Nevada**

**Speaker:** Diane M. Erwin

**Museum Scientist in charge of paleobotanical collections, Museum of Paleontology, UC-Berkeley**

The Mount Reba paleoflora, today perched high in the Sierra Nevada of northern California, has been heralded as the “nail in the coffin” for the idea that the Sierra Nevada was relatively low for much of the Tertiary period, and that it was rapidly uplifted over 5,000 feet during the last five million years. This idea of California as a lowland during the Tertiary was championed by Daniel I. Axelrod and influenced many in the geological community. Although this prominent paleobotanist was responsible for many of our ideas regarding paleoclimate, paleoelevation, and floral change during the Tertiary in western North America, his interpretations were based on plant identifications that do not always hold up to subsequent scrutiny. As a prime example, re-examination of the Mount Reba flora reveals that it represents an Abies-dominated flora suggestive of high elevations, not that of a Pseudotsuga-dominated lowland. Evidence from this flora, in conjunction with mounting evidence from a number of independent geological studies, suggests that the Sierra Nevada has been an upland for the last 65-plus million years, not a region uplifted during the late Tertiary as is generally accepted. The elevation of the ancestral Sierra Nevada not only has profound implications for understanding the biogeographic histories of plants, including the origin of the alpine flora.

**Upcoming Membership Meetings:**

January 24: Dan Norris: Towards a bryophyte flora of the East Bay

February 28: Matteo Garbelotto: Sudden Oak Death, a new disease threatening California oaks
Those of you who keep abreast of CNPS activities statewide as covered in the Bulletin are aware that a significant amount of time and effort over the last year has gone into a Strategic Planning process, coordinated by professional facilitator Marc Smiley. As your Chapter president, I have been involved in several steps of this process, and have been impressed with both the definite need and the progress we have been making.

I have strongly believed for some time now that many of the problems we’ve faced over the last several years are a result of “growing pains”; we’ve been a victim of our own success, outgrowing the casual way of going about our business that might work fine for a group consisting of a few dozen members, but which wreaks havoc for one representing nearly ten thousand people scattered throughout the state. Evidence for just how far we were from having a clear appreciation of all of our disparate goals has been apparent in the amount of dedicated effort it has taken to achieve some level of consensus on what exactly it is we do, or want to do, let alone how we should prioritize the use of existing and potential new resources.

The strategic planning process is not yet completed, and is in fact never completed, but needs to be revisited every few years. The current draft (PDF files only) can be viewed at the CNPS website, at http://www.cnps.org/planning/CNPS%20plan%20draft%20v5.pdf. As a starting point, our mission statement is now “To increase understanding and appreciation of California’s native plants and to conserve them and their natural habitats, through education, science, advocacy, horticulture, and land stewardship.” These last five items represent the five core program goals, each with a specific list of strategies (e.g., “Initiate and support the adoption of policies, regulations, laws and practices that strengthen the legal protection afforded to native plants” as an advocacy strategy). Strategies in turn spawn projects, targeted for specific years as resources allow.

In addition to program goals, there is a separate series of capacity goals, each of which also have designated strategies and projects. These are:

- Strengthen the network of people involved in native plant protection. * Increase involvement in and effectiveness of local Chapters. * Mobilize a committed, diverse, and effective pool of people to actively support CNPS.
- Develop stable and sufficient financial resources [HIGH PRIORITY!] * Establish the infrastructure necessary to support organizational excellence.

A critical step has already been taken toward this last goal, in that the decision was made to retain Marc Smiley’s services for an additional strongly needed effort. What many of us had initially confused with strategic planning, but is in fact a separate process, is that of governance restructuring. As Marc made clear, we are currently struggling with an organizational structure, in terms of lines of authority and decision making responsibilities, that is completely unwieldy for an organization with the number of officers and employees we currently have. On top of which we have the extra challenge of defining the various relations between Chapters and statewide organization, with the realization that the Chapter structure is also a primary source of our strength and effectiveness.

This report is only the briefest synopsis of a long, drawn-out process. Feel free to let me know of any specific comments or concerns (best by email: ertter@uclink4.berkeley.edu); as your Chapter president, I want to do my best to represent all of you!

... Barbara Ertter

Robert Ornduff

SOMBER NEWS: As many of you have heard, the botanical community has recently lost one of its most revered members, Dr. Robert Ornduff, who lost his battle with cancer on September 22. A long-time member and Fellow of the California Native Plant Society, Bob is particularly well known to native plant aficionados as the author of the classic Introduction to California Native Plant Life. As a professor at the University of California at Berkeley, Ornduff served as director of the UC Botanical Garden, director of the University and Jepson Herbaria, and trustee of the Jepson Herbarium. A full obituary can be viewed at http://www.berkeley.edu/news/media/releases/2000/10/03.ormduff.html. Following Bob’s expressed wishes, there will be no memorial service. For those wishing to make a contribution in his name, Bob designated the following local charities: the docent program at the U.C. Botanical Garden (janetwil@uclink4.berkeley.edu; 510-643-2755), the University Herbarium (ringrose@uclink4.berkeley.edu; 510-642-2465), both at U.C. Berkeley, Save Mt. Diablo (savemtdiablo@aol.com; 925-947 3535), and the Marin Agricultural Land Trust (web@malt.org; 415-663 1158). Bob’s loss leaves a gaping hole felt by local amateurs and international professionals alike.
Plant Sale Activities

Congratulations and many thank-yous to everyone participating in our very successful plant sale! They are the year-round Tuesday volunteers who showed up in weathers fair or foul, the September helpers coming to put the sale together, the contributors of their computer skills, the sale-weekend workers at their stations, and our supportive, appreciative customers.

A special round of applause goes to those who appeared in all of the above roles. Well done! (At the September CNPS picnic, Shirley McPheeters, who appeared in all the above roles and several others not mentioned here, was presented with a specially framed copy of a print by our poster artist, Lee McCafree, as a token of appreciation from the Chapter for all the work Shirley does. P.W.)

The funds raised will enable our Chapter to continue its work—in conservation, habitat protection, education, scholarships, publications, plant surveys—any and all directed toward native plant preservation.

Work sessions on Tuesdays have resumed, and plants remaining from the sale will be sold through January.

This month, rain or shine:

**Tuesdays, Nov. 7, 14, 21, 28**

9 a.m.-noon (mornings only for awhile)

Merritt College, Landscape Horticulture area.

Come when you can and become better acquainted with the plants as you make the cuttings or do the transplanting. Get to know the volunteers who make the plant sale what it is. We share what we know and learn as we go along. Come join us.

Bring your lunch if you can stay, and two quarters for the parking permit machine at the gate.

... Shirley McPheeters (925) 376-4095

... Phoebe Watts (510) 525-6614

State CNPS Executive Board

There are five applicants for three open positions as Directors-at-Large for the State Executive Board. Directors-at-Large are elected by the membership. Ballots are in the October-November-December issue of the CNPS Bulletin and will be counted just prior to the State Board meeting on Saturday, December 2, 2000 at the UCB Faculty Club.

The five applicants and their Chapters are: Charlice Danielsen (East Bay), John Game (East Bay), Diana Hickson (Sacramento Valley), Jim Sharp (East Bay), and Alison Shilling (Riverside/San Bernardino).

If you have questions about the election process, please phone the state office at 916-447-2677 or email: cnps@cnps.org

Bryophytes Rule!

**A New Program!**

By a unanimous vote at the October board meeting, the Board of Directors welcomed Dan Norris as Committee Coordinator for Bryophytes (= mosses, liverworts, and hornworts), a new program for the East Bay Chapter. As many of you know, Dan is one of the premier authorities on the moss flora of California (and New Guinea, among other places!) A former professor at Humboldt State University, Dan is again in residence at Berkeley, and has decided that it is time for a bryophyte counterpart to Annotated Checklist of the East Bay Flora. In conjunction with this goal, Dan will be leading a series of bryophyte field trips and providing training in bryophyte identification. Keep an eye on the Bay Leaf, or contact Dan directly (norris_daniel@hotmail.com) if you want to be involved.

Native Plant Restoration Activities

**Native Here Nursery**

Margot Cunningham has been hired as Sales Manager for the nursery. She is responsible for keeping the nursery open on Saturdays. Charli Danielsen, Nursery Manager, still keeps the nursery open Friday mornings and supervises production. Volunteers are welcome to join in any time the nursery is open. There is always plenty to do! Margot or Charli will happily put you to work if you show up.

The seed collections last summer and this past one have been good and there is a steady supply of new seedlings being put out for sale. November through January is the best time to plant local natives to take advantage of the cool, wet season. So take advantage of our new open hours to stock up. Most of the informational materials developed for the nursery may be viewed on the Chapter website, illustrated with Gudrun Kleist’s photographs.
Field Trip

Saturday, November 25, at 10 a.m. Barbara Ertter will lead a half day field trip up Maguire Peak in Sunol Regional Wilderness. Highlights include fall colors along Welch Creek, and Quercus palmeri, an oak that appears nowhere else in the East Bay but is common in southern California. The field trip may also include some late wildflowers, plus two other plants limited in the East Bay distribution to Sunol Wilderness: Artemisia dracunculus, and Monardella antonina. We will also search for an undescribed variant of Eriogonum nudum that has been reported in the area. Participants will meet at the parking lot for the main entrance to Sunol Regional Park, and then carpool to the trail head. Parking fees are $4 per car, and hikers are encouraged to carpool. From I-680, take the Hwy. 84/Calaveras Road exit (this exit is just after the Sunol exit). Turn left from the offramp onto Calaveras Road, and go straight for about 6 miles. Continue straight past the nurseries on the right side of Calaveras, and then cross a bridge. Turn left onto Geary Road, and follow the signs to the Sunol Regional Park entrance. Bring water and lunch. Heavy rain cancels.

New Threat To Oak Woodlands

The coastal oaks in Marin and Santa Cruz counties are dying. Scientists have known about Sudden Oak Death (SOD) syndrome since it first appeared on tanoaks in 1995 in Mill Valley, but the cause of the disease remained a mystery until July when researchers Matteo Garbelotto and David Rizzo isolated the probable culprit in the laboratory. What they discovered is a new species of Phytophthora.

Phytophthora (pronounced Phy-TOFF-thor-uh) is an oomycete — a water mold. UC-Berkeley plant pathologist Matteo Garbelotto says this new species is almost genetically identical to Phytophthora lateralis, a root fungus that has killed thousands of Port Orford cedars in the Six Rivers and Siskiyou National Forests. “Geographically, we’re talking about adjacent areas,” says Garbelotto. “They are both pathogenic, but on trees that are very, very different. It makes us take this really seriously.” The alarming difference is that the new Phytophthora is killing oak trees: Tanoak (Lithocarpus densiflorus), coast live oak (Quercus agrifolia) and black oak (Quercus kelloggii). Another difference is that the Bay Area’s Phytophthora appears to infect host trees through the trunk and limbs.

When grown in petri dishes in the laboratory, colonies of Phytophthora resemble clusters of cotton fiber. Under cool, wet conditions similar to those along the California coast, it produces tiny lemon-shaped spore sacs called sporangia. The offspring, tiny zoospores, have twin flagella, which swim through moisture to feed on the outer bark layer. The zoospores produce an enzyme that breaks down the tree’s circulatory system. The first visible signs of the disease appear on the trunk in the form of oozing sores and cankers.

As the disease progresses, the tree becomes vulnerable to invasion by bark beetles, once thought to be the cause of SOD. Scientists now know that the beetles are not capable of invading healthy trees. They have also found that when insecticides are used to rid affected trees of bark beetles, there is no impact on tree mortality. In the final stage, Hypoxylon thouarsianum, a wood-rotting ascomycete, forms its characteristic small black fruiting bodies on the outer bark layer.

UC-Davis plant pathologist David Rizzo wants to raise public awareness before winter, when the danger of spore dispersal through human actions will be at its highest. Phytophthora spores are most likely spread by hikers’ shoes and animals’ feet, bicycle and car tires, infected firewood, and soil moved in construction areas. “Preventing the movement of soil and wood will be critical to slowing the spread of the fungus to other oak woodlands,” Rizzo said. With so many trees dying, and no limits on transport of firewood, the disease could easily be spread to the oak woodlands of the Sierra.

Garbelotto recommends that people entering affected areas should wash boots, bicycle or car tires with a 10% bleach solution. While this may sound radical, the US Forest Service has ordered seasonal road closures in the Siskiyou National Forest to prevent the spread of Phytophthora. (Continued on back page)

State Board Meets in Berkeley

The State Board of Directors of CNPS will meet on Saturday, December 2 at the Faculty Club on the UC-Berkeley campus. The meeting lasts from 9 a.m.-5 p.m., with a break for lunch. All members are welcome to attend. This is an opportunity to learn more about some of the issues dealt with on a statewide basis.

On the evening of December 2, a dinner will be held, also at the Faculty Club. The after-dinner program is entitled: The Cedars, Sonoma County’s Remarkable Serpentine Canyonlands. Roger Raiche and David McCrory will describe, with pictures, one of Sonoma County’s most inaccessible yet unusual botanical, geological, and scenic areas.

Price information and menu choices are not available at the time this is being written, but if you are interested in making reservations for the dinner and program, contact Phoebe Watts (525-6614) or any member of the State Board.

(Continued on back page)
The California Native Plant Society is open to all. The mission of the California Native Plant Society is to increase understanding and appreciation of California’s native plants and to preserve them in their natural habitat through scientific activities, education, and conservation. Membership includes a subscription to the quarterly journal Fremontia.

New Membership Application

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Name ________________________________________________________________
Address _______________________________________________________________
Zip ________________________ Telephone _______________________________

I wish to affiliate with:
___ East Bay Chapter (Alameda and Contra Costa Counties)
___ Other _________________________

Mail application and check to:
Membership Chairman, California Native Plant Society, 1722 J St., Suite 17, Sacramento, CA 95814.

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Activities of Others

**California Lichen Society** will hold a workshop on ‘Ascus staining’ on Saturday, November 4 at 401 Hensill Hall at San Francisco State University from 10 a.m. to 4 p.m. Lichen stainers will follow instructions from a publication by John Thompson, to learn how to stain ‘Ascus’ culture to identify species and morphological character. The teaching set of crustose lichens will be available, and participants are invited to bring any specimens to practice this staining technique.

**Volunteer in the University and Jepson Herbaria!**
Saturday, November 18 marks the next Group Volunteer Day in the University and Jepson Herbaria. See October Bay Leaf for details. No experience necessary!

The **31st Annual Fungus Fair** of the Mycological Society of San Francisco will be held on December 9 and 10 at the Hall of Flowers, Golden Gate Park, in San Francisco. Over 250 species of mushrooms will be on display. Speakers include: Paul Stamets, on the use of mushrooms for bioremediation; Janet Doell of the Lichen Society, who will give a multimedia presentation of “Lichens Exposed”; and Dr. Mo-Mei Chen, visiting professor at UC-Berkeley, who will talk about medicinal mushrooms. Local chefs will demonstrate cooking techniques both days. For more information, call the MSSF hotline at (415) 759-0495, or visit www.mssf.org.

**Phytophthora**

Phytophthora lateralis. Officials at the East Bay Regional Parks District are very aware of Phytophthora and are carefully monitoring recent developments.

Participating agencies have formed the California Oak Mortality Task Force, which first met in October. Scientists encourage citizen participation through an interactive Internet website to log occurrences of oak death: http://camfer.cnr.berkeley.edu/oaks/tree-database.htm. For more information, the UC Berkeley website has updates on research and monitoring activities:

http://himalaya.cnr.berkeley.edu/oaks/. The website of the University of California Cooperative Extension program in Marin County is: http://cemarin.ucdavis.edu/index2.html.

David Rust is Vice President of the Mycological Society of San Francisco. A previous version of this article appeared in the September issue of Mushroom, The Journal of Wild Mushrooming.